



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/619,363

07/19/2000

Leonard George Bleile

B-3973-618064-6

2189

7590

04/21/2004

EXAMINER

MOORE, JAMES K

Richard P Berg

Ladas & Parry

5670 Wilshire Boulevard

Ste 2100

Los Angeles, CA 90036-5679

ART UNIT

PAPER NUMBER

2686

13

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/619,363

Applicant(s)

BLEILE ET AL.

Examiner

James K Moore

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-14,16-18,20-33,35-42,44-46,48-50 and 52-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-14,16-18,20-22,25-28,30-33,35-42,44-46,48,52-54 and 56 is/are rejected.
- 7) ☒ Claim(s) 23,24,29,49,50 and 55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4, 5-14, 16-18, 20-33, 35-42, 44-46, 48-50, and 52-56 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 11-14 and 39-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 11 and 39, the specification does not describe how the first expansion interface may be programmed by commands received at the communications appliance interface, thus it does not enable one skilled in the art to use this aspect of the invention.

Regarding claims 12 and 40, the specification does not describe how the first expansion interface may be programmed by commands received from the first wireless

transceiver port or the communication units, thus it does not enable one skilled in the art to use this aspect of the invention.

Regarding claims 14 and 42, the specification does not describe how the first expansion interface may be programmed by commands received from a communications appliance in communication with the first communications appliance interface, thus it does not enable one skilled in the art to use this aspect of the invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 40 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 40 recites the limitation "said second communications unit." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 2686

7. Claims 1, 4, 6, 7, 9, 10, 16, 20-22, 25-28, 30, 33, 35-38, 48, 52-54 and 56 are rejected under 35 U.S.C. 102(a) as being anticipated by Berry et al. (U.S. Patent No. 5,953,676).

Regarding claim 1, Berry discloses a communications unit (remote station 10) comprising a first wireless transceiver port that communicates with a first wireless transceiver (160) that conducts wireless communications with a wireless base station (20), and a first expansion interface (analog line circuit module 120) in communication with the first wireless transceiver port and having a bus interface that communicates with communication units (telephones 15) on communication channels associated with the communications units to permit any of the communication units to communicate with the wireless base station through the first wireless transceiver. See Figures 1 and 2 and col. 3 lines 56 through col. 4, line 15.

Regarding claim 4, Berry discloses all of the limitations of claim 1, and also discloses that the wireless transceiver port and the first expansion interface are on a common base. See Figure 2.

Regarding claim 6, Berry discloses all of the limitations of claim 1, and also discloses that the communications unit comprises a first communications appliance interface (2-wire interface 110) that selectively communicates with the first wireless transceiver and the first expansion interface to permit a communications appliance (telephone 15) connected to the first communications appliance interface to communicate with the wireless base station. See col. 3, line 56 through col. 4, line 9 and col. 6, lines 16-28.

Regarding claim 7, Berry discloses all of the limitations of claim 6, and also discloses that the first communications appliance interface includes an analog telephone interface. See col. 4, lines 4-9.

Regarding claim 9, Berry discloses all of the limitations of claim 6, and also discloses that the first expansion interface and the first communications appliance interface are selectively operable to use the first wireless transceiver port. See col. 6, lines 16-28.

Regarding claim 10, Berry discloses all of the limitations of claim 6, and also discloses that the first expansion interface supports independent communications between another communications unit (one of the telephones 15) and the wireless transceiver while supporting independent communications between another communications unit (one of the telephones 15) and the first communications appliance interface. See col. 6, lines 16-28.

Regarding claim 16, Berry discloses all of the limitations of claim 1, and also discloses that the bus interface includes a PCM bus interface. See col. 4, lines 10-15.

Regarding claim 20, Berry discloses all of the limitations of claim 1, and also discloses that the communications unit comprises a processor circuit (control and signaling module 130) programmed to effect communications between the first wireless transceiver port and the first expansion interface. See col. 6, lines 16-28.

Regarding claim 21, Berry discloses all of the limitations of claim 20, and also discloses that the communications unit comprises a communications appliance interface (2-wire interface 110) and the processor circuit effects communications between the first

wireless transceiver port, the first expansion interface, and the communications appliance interface. See col. 3, line 56 through col. 4, line 9 and col. 6, lines 16-28.

Regarding claim 22, Berry discloses all of the limitations of claim 21, and also discloses that the processor circuit is programmed to receive dialed digits from the communications appliance interface and communicate the dialed digits to the first wireless transceiver port to cause a transceiver in communication with the first wireless transceiver port to dial the dialed digits on a wireless network. See col. 6, line 55 through col. 7, line 5.

Regarding claim 25, Berry discloses a system for providing multiple access to a wireless transceiver. The system comprises a plurality of communication units (remote stations 10, telephones 15). See Figure 1. Some of the communication units include a first wireless transceiver port that communicates with a first wireless transceiver (160) that conducts wireless communications with a wireless base station (20), and a first expansion interface (analog line circuit module 120) in communication with the first wireless transceiver port and having a bus interface that communicates with expansion interfaces of communication units on communications channels associated with the communications units, to permit any of the communications units to communicate with the wireless base station through the first wireless transceiver. See Figure 2 and col. 3 lines 56 through col. 4, line 15.

Regarding claim 26, Berry discloses all of the limitations of claim 25, and also discloses that each communications unit comprises a communications appliance

interface (2-wire interface 110) that communicates with the first wireless transceiver port. See col. 4, lines 4-9.

Regarding claim 27, Berry discloses all of the limitations of claim 26, and also discloses that some of the communication units (10) have wireless transceiver ports that are accessed by some of the communication appliance interfaces. See col. 3, line 56 through col. 4, line 9.

Regarding claim 28, Berry discloses all of the limitations of claim 27, and also discloses that some of the communications appliance interfaces access some of the wireless transceivers through expansion interfaces on communications units on which the communications appliances are located and communications units on which the wireless transceivers are located. See col. 3, line 56 through col. 4, line 9.

Regarding claim 30, Berry discloses a method of providing multiple access to a wireless transceiver comprising supporting communications through a first expansion interface (analog line circuit module 120) having a bus interface that provides a plurality of communication channels associated with communications units (telephones 15) between a first wireless transceiver port of a first communications unit (remote unit 10) and one of the communication units, and using the first wireless transceiver port to communicate with a first wireless transceiver (160) that conducts wireless communications with a wireless base station (20), to permit any of the communication units to communicate with the wireless base station through the first wireless transceiver. See Figures 1 and 2, col. 3, line 56 through col. 4, line 9, and col. 6, lines 16-28.

Regarding claim 33, Berry discloses all of the limitations of claim 30, and also discloses that supporting communication comprises supporting communications between the first wireless transceiver port and the first expansion interface within a common base. See Figure 2.

Regarding claim 35, Berry discloses all of the limitations of claim 30, and also discloses that the method comprises selectively conducting communications between a first communications appliance interface (2-wire interface 110) and the first wireless transceiver and the first expansion interface to permit a communications appliance (telephone 15) connected to the communications appliance interface to communicate with the base station. See col. 6, lines 16-28.

Regarding claim 36, Berry discloses all of the limitations of claim 35, and also discloses that the method comprises conducting communications with a telephone in communication with the first communications appliance interface. See col. 6, lines 16-28.

Regarding claim 37, Berry discloses all of the limitations of claim 35, and also discloses that the method comprises selecting the first expansion interface to use the first wireless transceiver port. See col. 6, lines 16-28.

Regarding claim 38, Berry discloses all of the limitations of claim 35, and also discloses that the method comprises simultaneously supporting independent communications between another communications unit (one of the telephones 15) and the wireless transceiver while supporting independent communications between another

communications unit (one of the telephones 15) and the first communications appliance interface. See col. 6, lines 16-28.

Regarding claim 44, Berry discloses all of the limitations of claim 30, and also discloses that communications are supported through a PCM bus interface. See col. 4, lines 10-15.

Regarding claim 48, Berry discloses all of the limitations of claim 30, and also discloses that the method comprises receiving dialed digits from a communication appliance interface (2-wire interface 110) and communicating the dialed digits to the first wireless transceiver port to cause a transceiver in communication with the first wireless transceiver port to dial the dialed digits on a wireless network. See col. 6, line 55 through col. 7, line 5.

Regarding claim 52, Berry discloses all of the limitations of claim 30, and also discloses that communications are supported between a communications appliance interface on some of the communications units and the first wireless transceiver port. See col. 4, lines 4-9.

Regarding claim 53, Berry discloses all of the limitations of claim 52, and also discloses that communications are supported between wireless transceiver ports on some of the communications units and communications appliance interfaces on some of the communications units. See col. 3, line 56 through col. 4, line 9.

Regarding claim 54, Berry discloses all of the limitations of claim 53, and also discloses that expansion interfaces on communications units permit some of the

communications appliance interfaces to access some of the wireless transceivers. See col. 3, line 56 through col. 4, line 9.

Regarding claim 56, Berry discloses all of the limitations of claim 1, and also discloses that the first wireless transceiver port communicates with a first wireless transceiver (160) that conducts wireless communications with a wireless base station (20) of a public network. See Figures 1 and 2.

Claim Rejections - 35 USC § 103

8. Claims 2 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berry in view of Lu et al. (U.S. Patent Application Pub. No. 2002/0009991).

Regarding claims 2 and 31, Berry discloses all of the limitations of claims 1 and 30, but does not disclose that the bus interface time multiplexes the communications channels. However, Lu teaches that a time division multiplexed bus has high bandwidth capacity and thus facilitates efficient switching of voice and digital data. See paragraph 129. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Berry with Lu, such that the bus interface time multiplexes the communications channels, in order to facilitate efficient switching of voice and digital data.

9. Claims 3 and 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berry in view of Basile (U.S. Patent No. 4,519,074).

Regarding claims 3 and 32, Berry discloses all of the limitations of claims 1 and 30, but does not disclose that the bus interface frequency multiplexes the communications channels. However, Basile teaches that frequency division multiplexing can be used to provide multiple channels over a single cable. See col. 1, lines 12-27. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Berry with Basile, such that the bus interface frequency multiplexes the communications channels, so that the communication channels can be sent through a single cable.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berry in view of well known prior art.

Regarding claim 8, Berry discloses all of the limitations of claim 6, but does not disclose whether the first wireless transceiver port, the first communications appliance interface, and the first expansion interface are contained within a common base. However, it is well known in the art to incorporate multiple components in a common housing for the purposes of limiting the number of components a user must physically handle. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Berry, such that the first wireless transceiver port, the first communications appliance interface, and the first expansion interface are contained within a common base, in order to limit the number of components that a user must physically handle.

11. Claims 17, 18, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berry in view of Schornack et al. (U.S. Patent No. 5,946,616).

Regarding claims 17 and 45, Berry discloses all of the limitations of claims 1 and 30, but does not disclose that the first wireless transceiver port includes a receptacle that receives and holds a wireless telephone. Schornack discloses a communications unit (110) that includes a wireless transceiver port that communicates with a wireless transceiver that conducts wireless communications with a wireless base station (102). The communications unit also includes an expansion interface in communication with the wireless transceiver port that permits other communications units (108) to communicate with the wireless base station through the wireless transceiver. The wireless transceiver port includes a receptacle that receives and holds a wireless telephone (212) containing the wireless transceiver, thereby allowing mobile use of the wireless transceiver. See Figure 1 and col. 1, lines 6-29. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Berry with Schornack, such that the first wireless transceiver port includes a receptacle that receives and holds a wireless telephone, in order to provide for mobile use of the wireless transceiver.

Regarding claims 18 and 46, Berry discloses all of the limitations of claims 1 and 30, but does not disclose that the first wireless transceiver port communicates with a data interface on a wireless telephone. Schornack discloses a communications unit that includes a wireless transceiver port that communicates with a wireless transceiver that conducts wireless communications with a wireless base station. The communications

unit also includes an expansion interface (208) in communication with the wireless transceiver port that permits other communications units (108) to communicate with the wireless base station through the wireless transceiver. The wireless transceiver port communicates with a data interface on a wireless telephone (212) containing the wireless transceiver, thereby allowing mobile use of the wireless transceiver. See Figure 4 and col. 7, lines 1-12. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Berry with Schornack, such that the first wireless transceiver port communicates with a data interface on a wireless telephone, in order to allow mobile use of the wireless transceiver.

Allowable Subject Matter

12. Claims 23, 24, 29, 49, 50 and 55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken Moore, whose telephone number is (703) 308-6042. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached at (703) 305-4379.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Application/Control Number: 09/619,363
Art Unit: 2686

Page 15

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ken Moore

4/13/04

JKM

Marsha D Banks-Harold

MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600